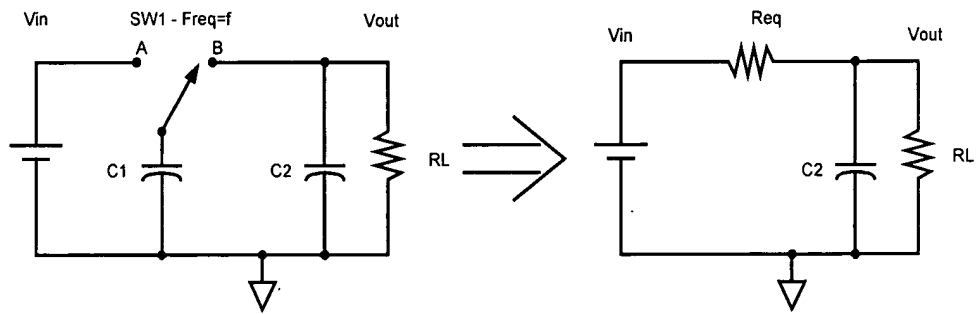


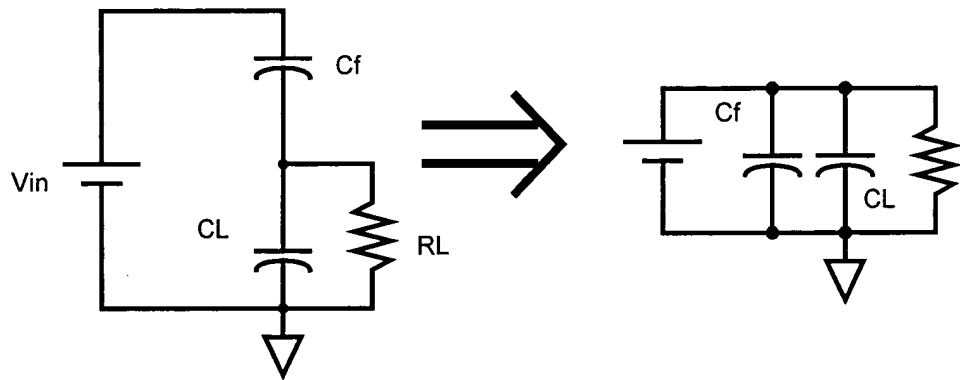
Docket #: IR-2310 (2-3711)  
Title: CONTROL IC FOR LOW POWER  
AUXILIARY SUPPLIES  
Inventor: Edgar ABDOULIN  
Contact: James A. Finder (212) 382-0700  
Drawings: 25 Sheets (Figs. 1-20)

**Figure 1 – Prior Art**



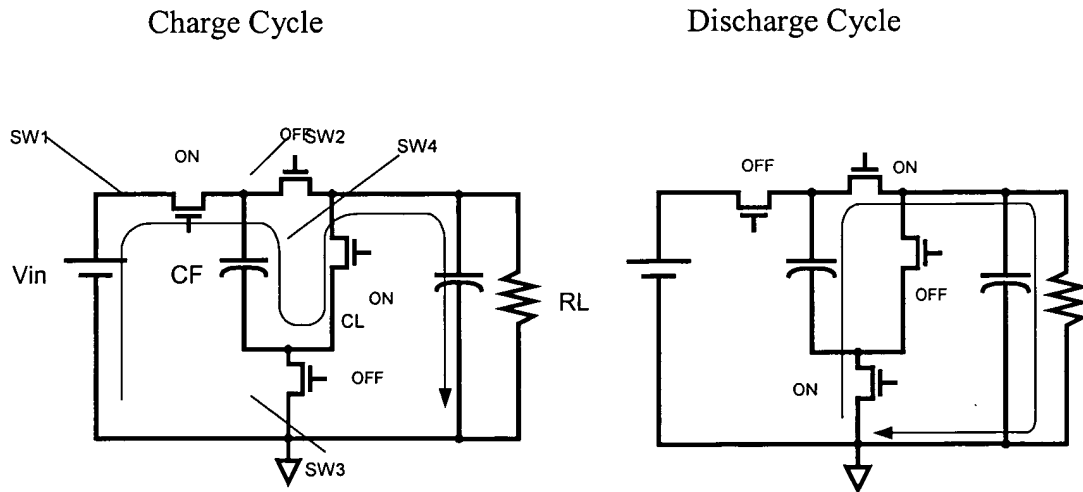
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**Figure 2 – Prior Art**

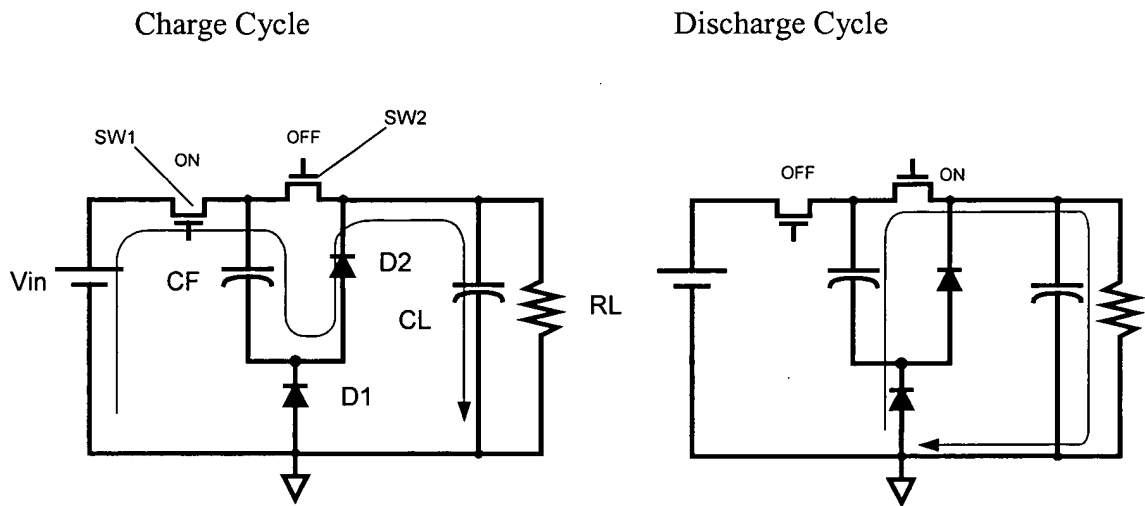


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**Figure 3 - Prior Art**

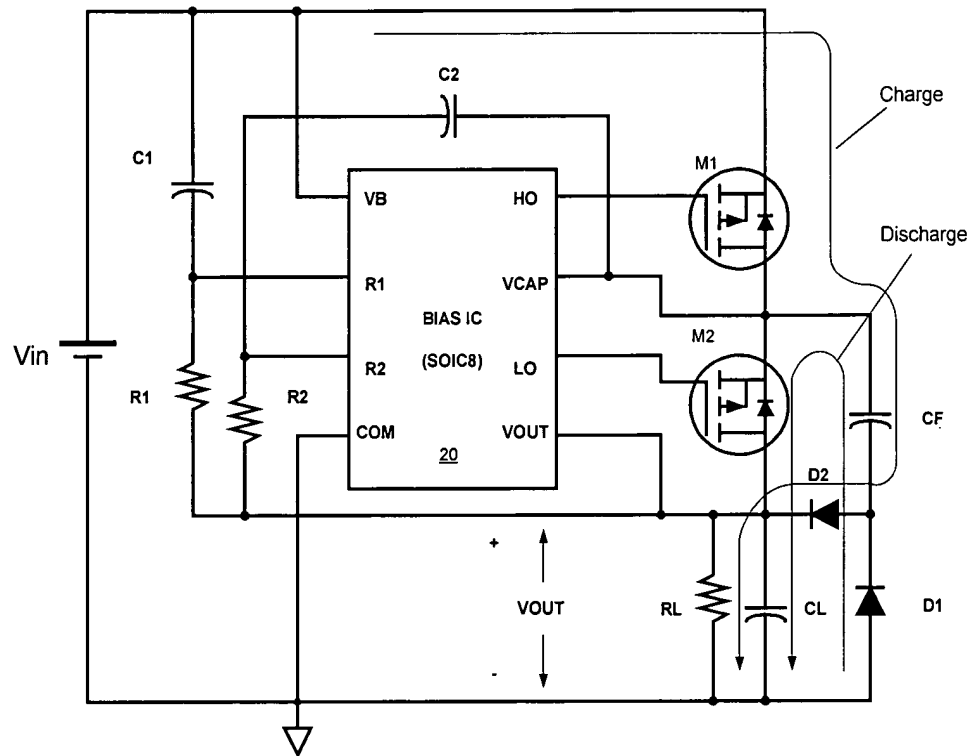


**Figure 4**



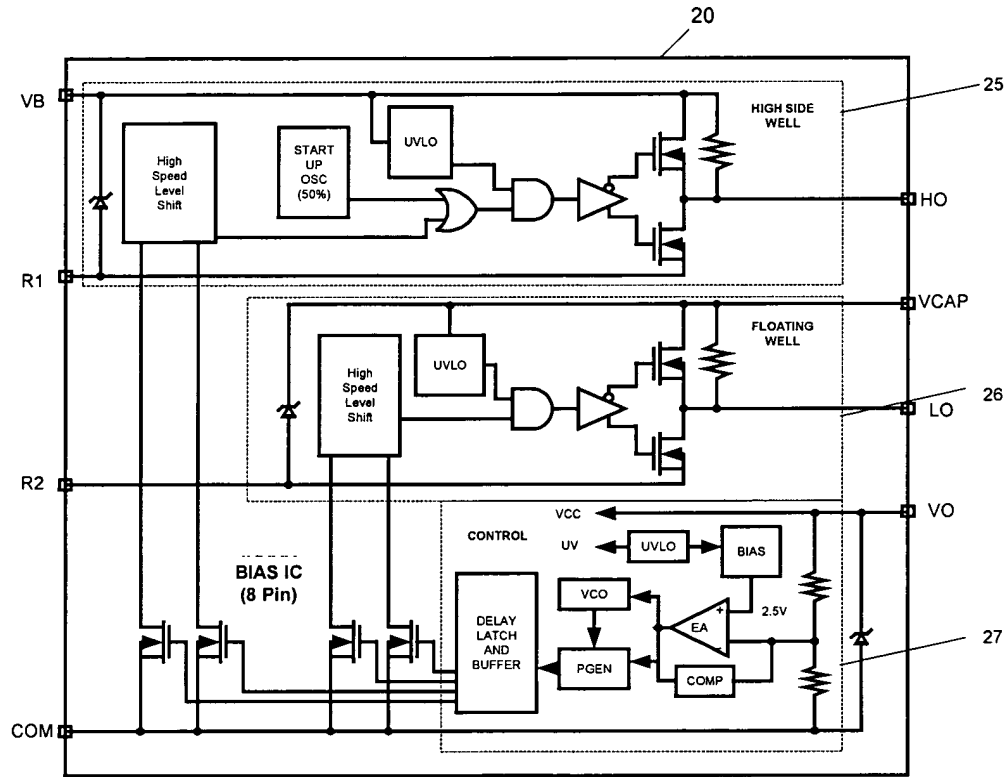
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**Figure 5a**



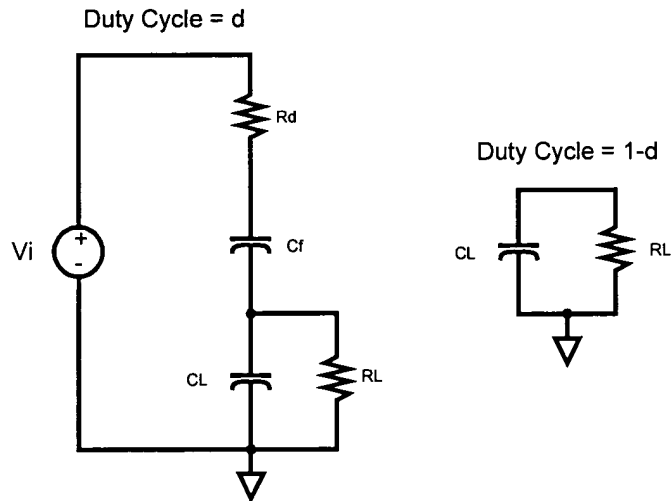
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Figure 5b



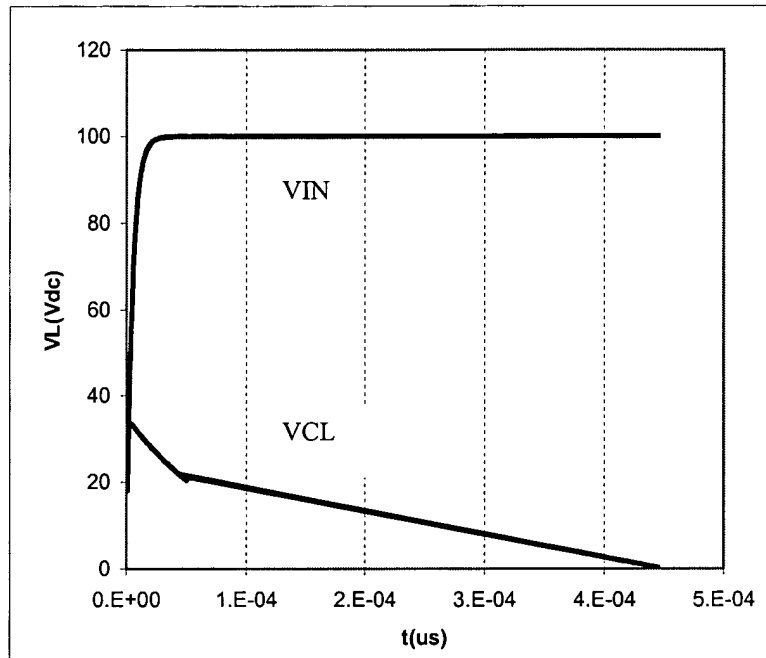
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**Figure 6**



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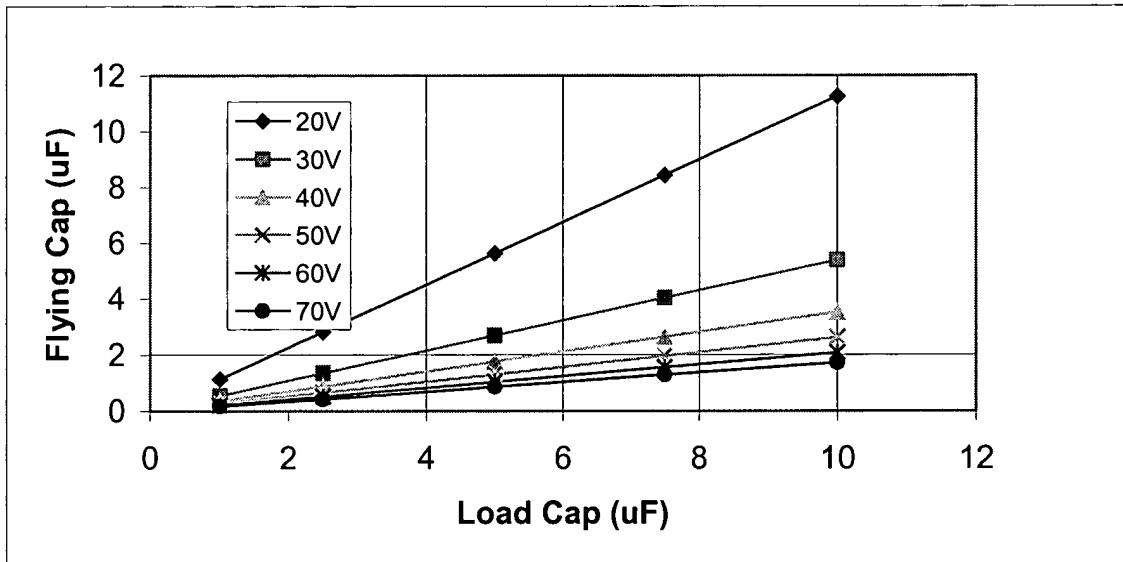
**Figure 7**





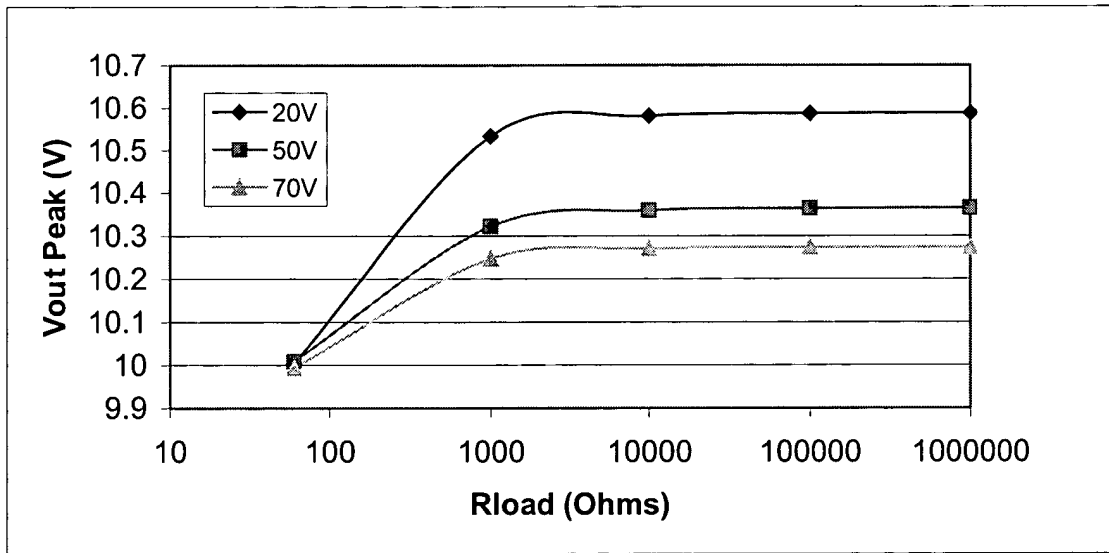
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**Figure 8a**

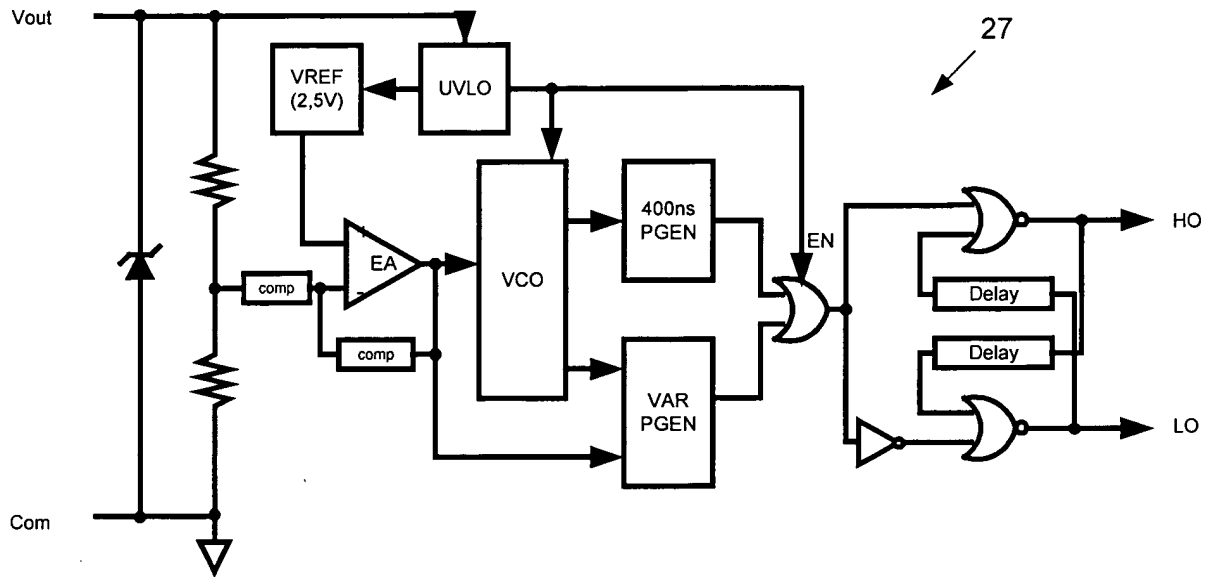


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**Figure 8b**

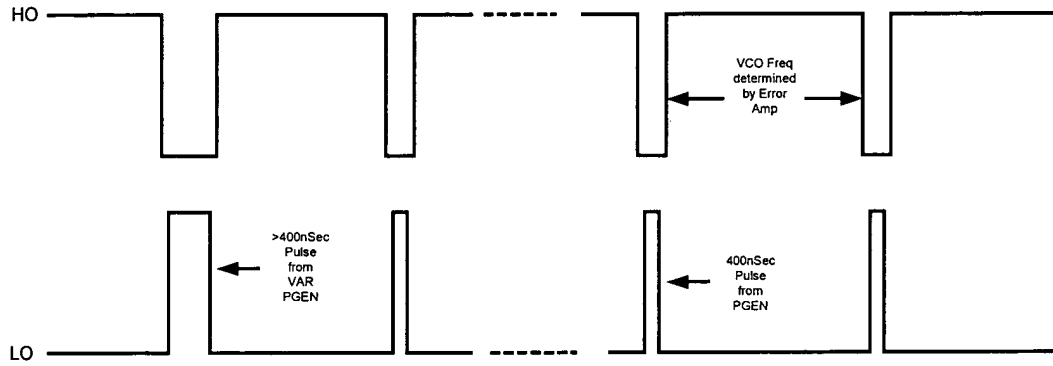


**Figure 9**



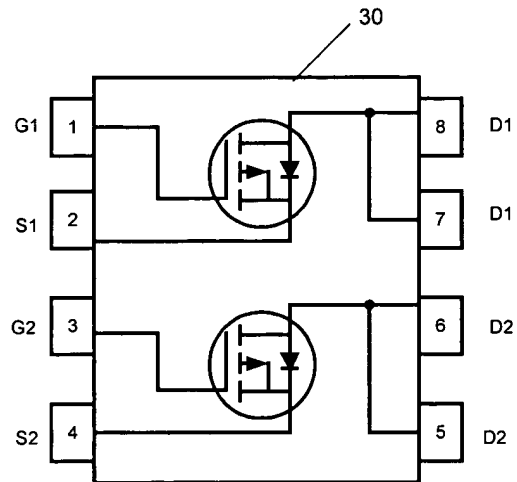
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**Figure 10**



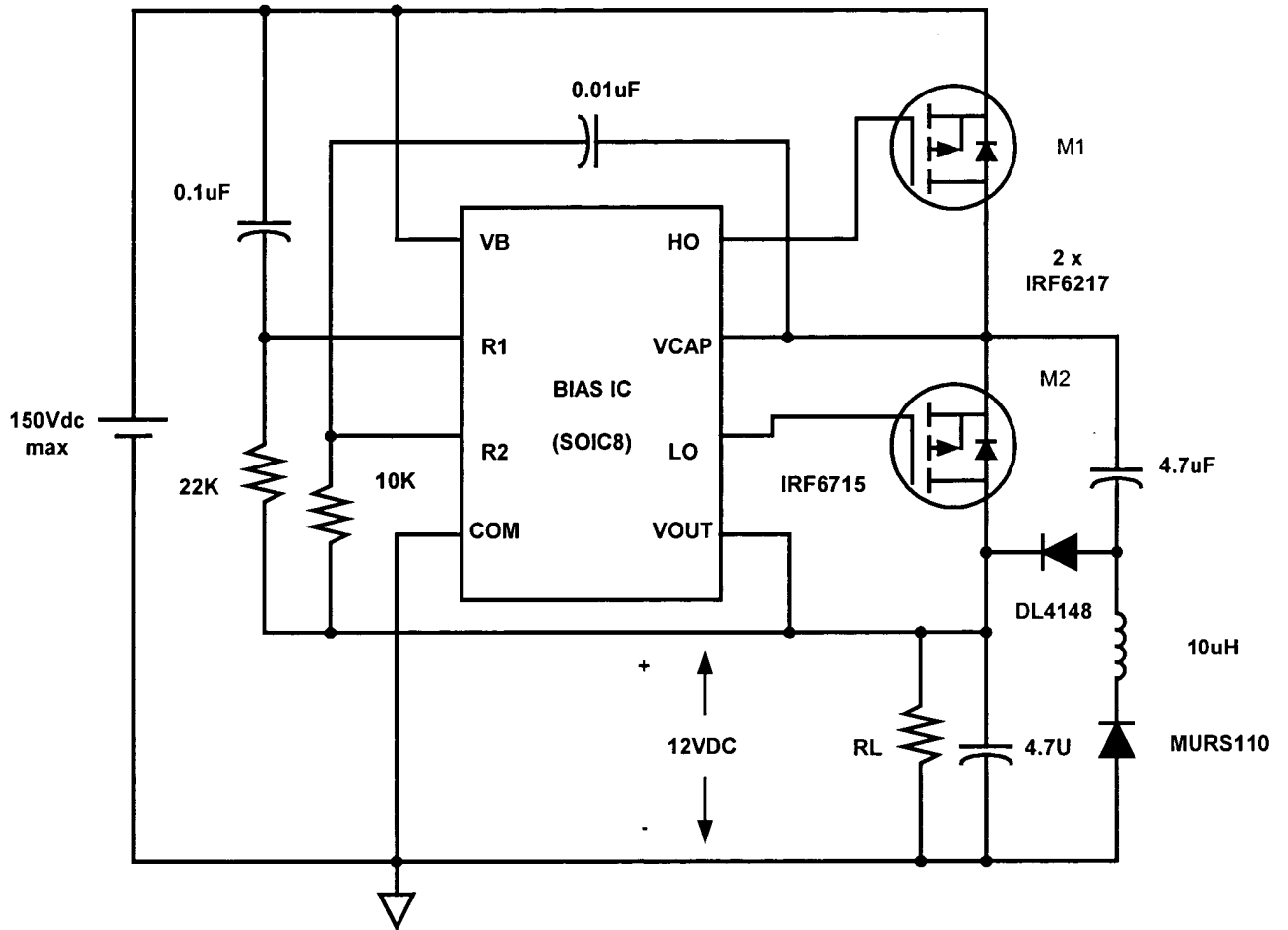
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**Figure 11a**



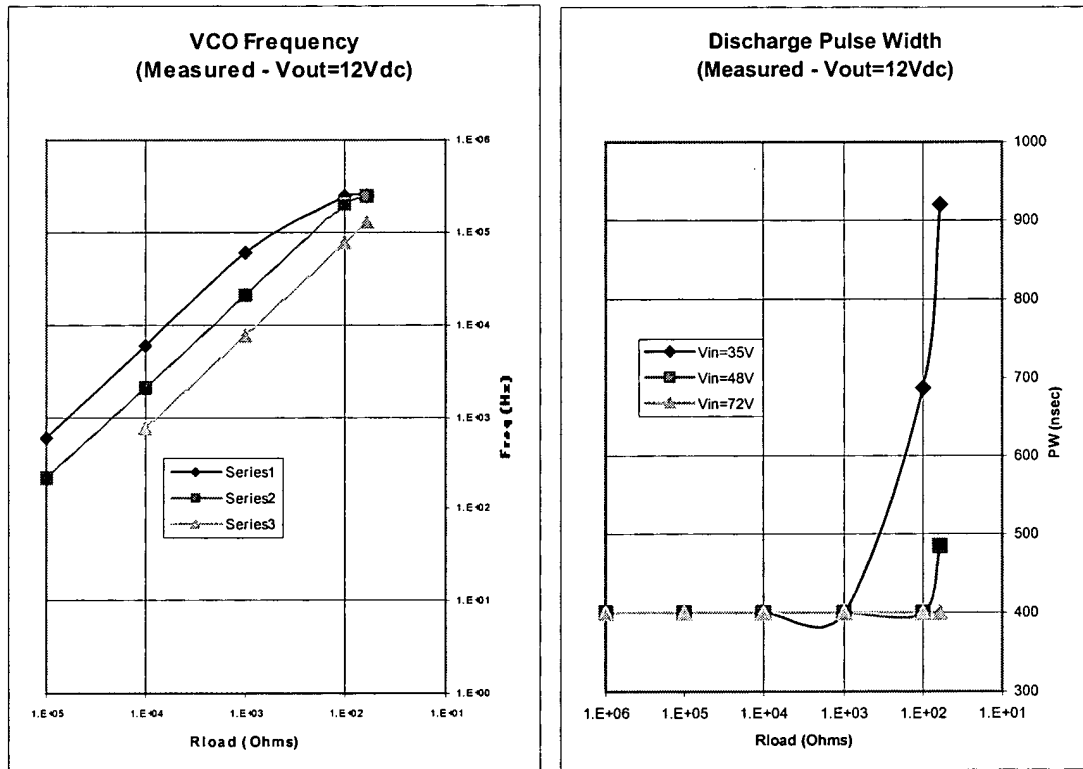
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Figure 11b



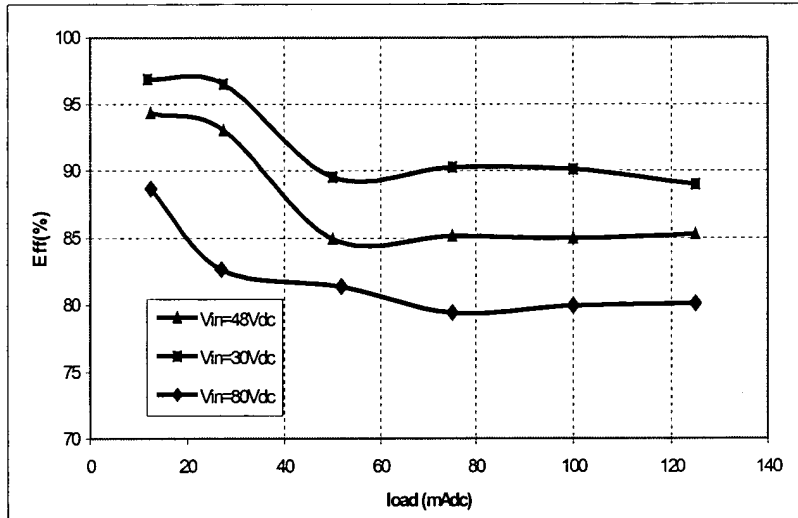
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**Figure 12 – Verification of operating range**



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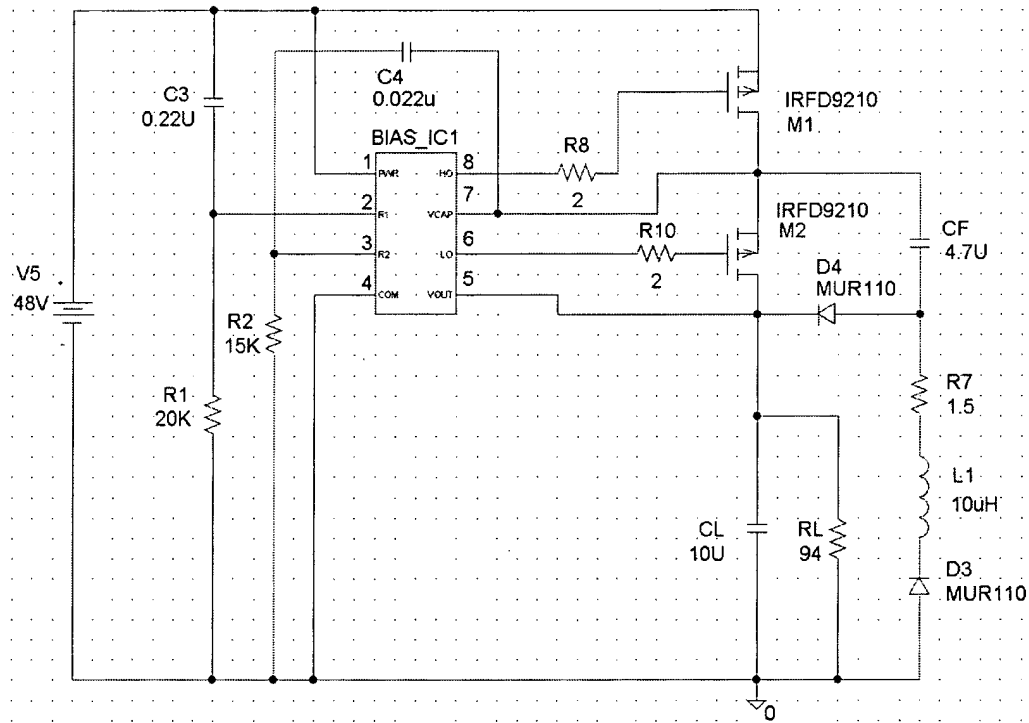
Figure 13





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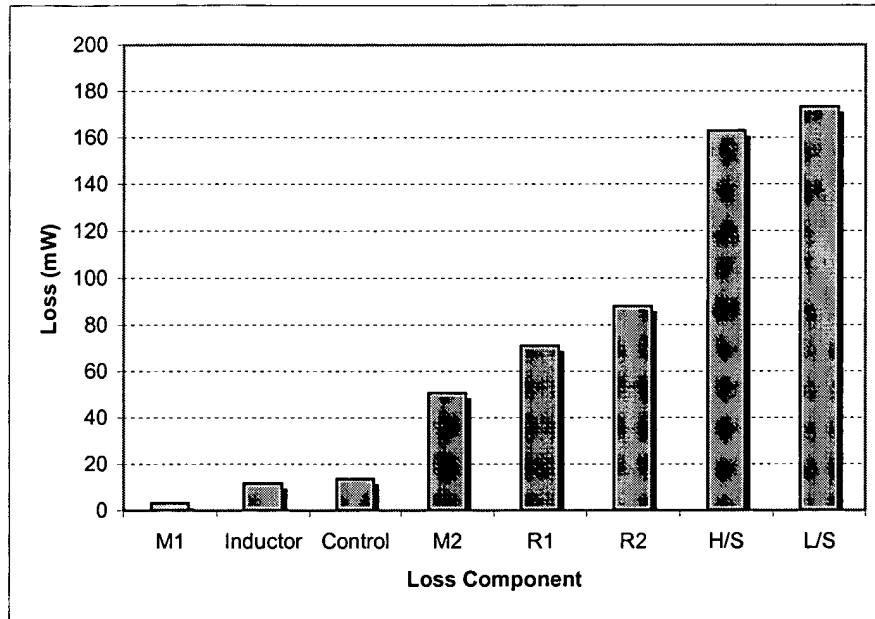
**Figure 14a**



Vin=48V  
Iin=42.2mA  
Vout=11.7V  
Load=94 Ohms  
Pin=2.027W  
Pout=1.461  
Eff=72.1%

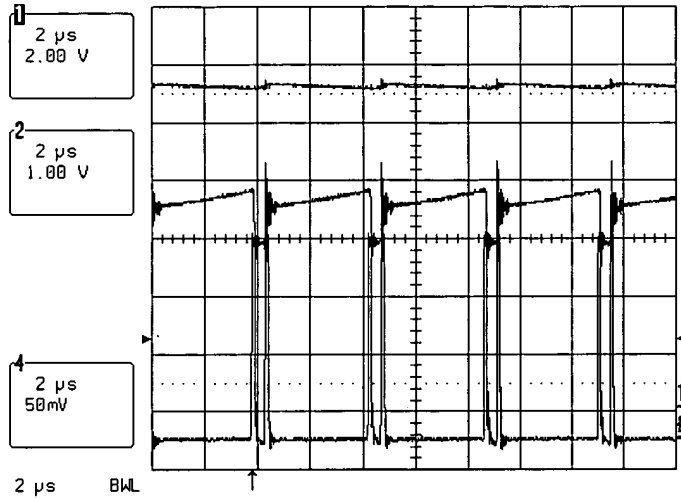
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**Figure 14b**



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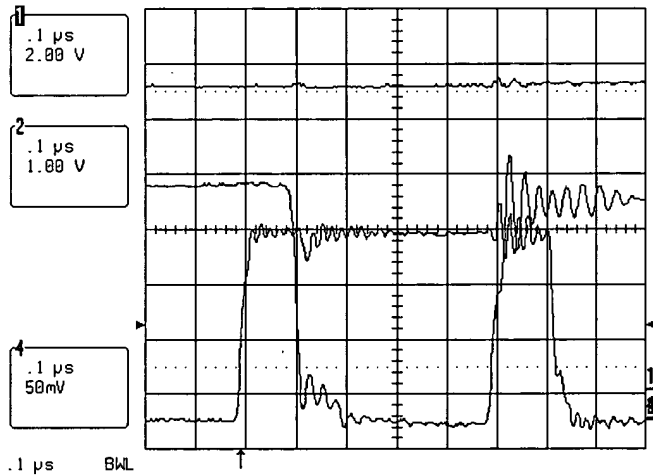
12-Nov-02  
18:23:18



**Figure 15a:**  
BIAS IC Waveforms

CH2: M1 drive  
CH4: M2 drive  
CH1: Output voltage

12-Nov-02  
18:23:30

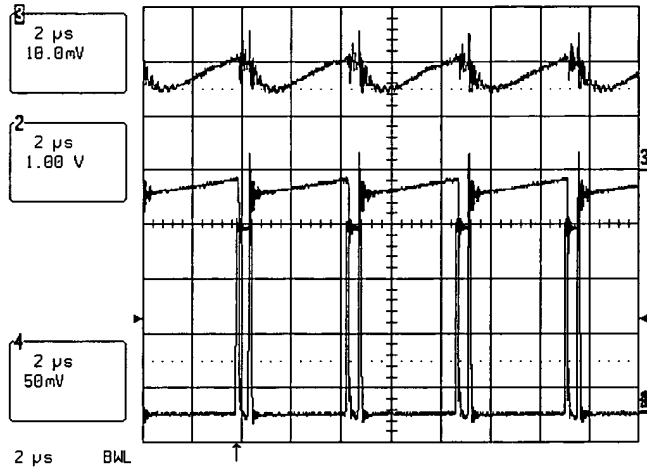


**Figure 15b:**  
BIAS IC Waveforms  
(Expanded)

CH2: M1 Drive  
CH4: M2 Drive  
CH1: Output voltage

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12-Nov-82  
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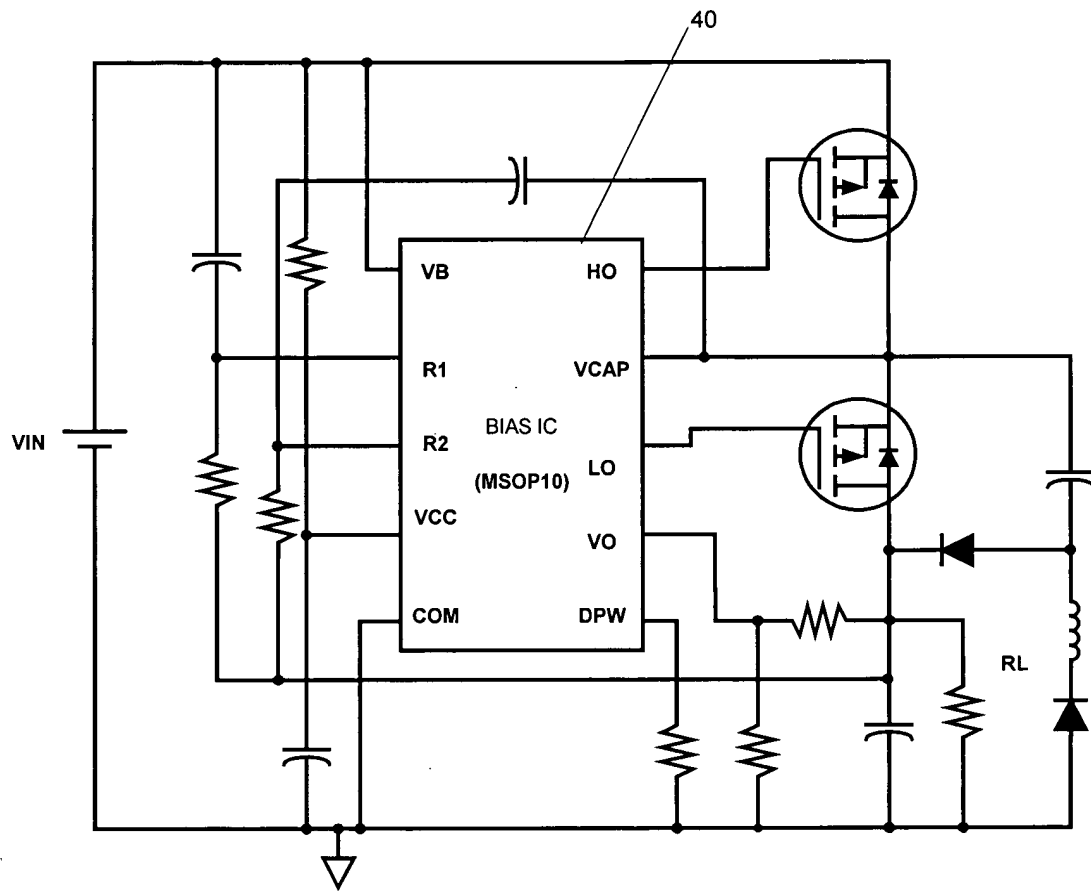


**Figure 15c:**  
BIAS IC Waveforms

CH2: M1 Drive  
CH4: M2 Drive  
CH3: Input current  
(10mA/div)

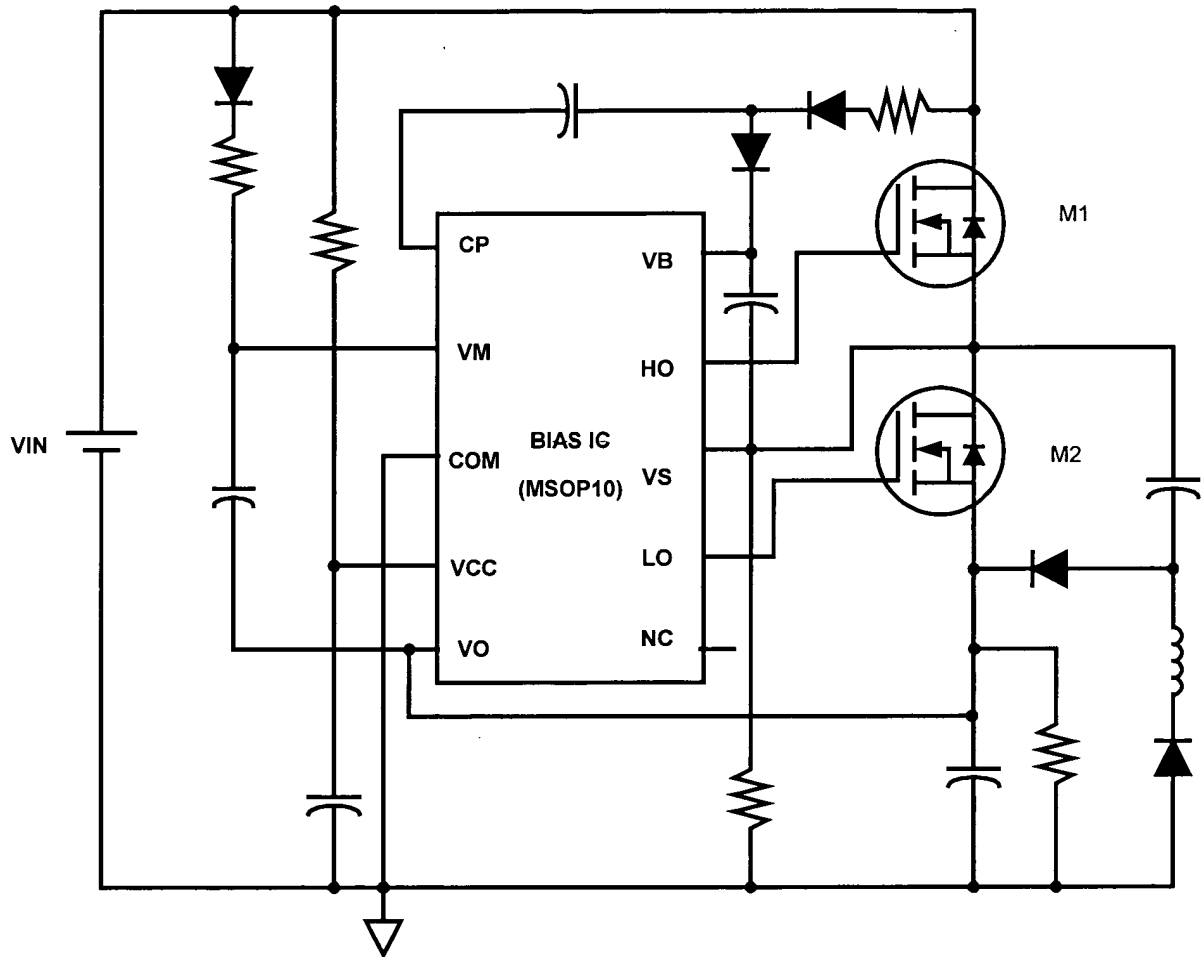
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Figure 16



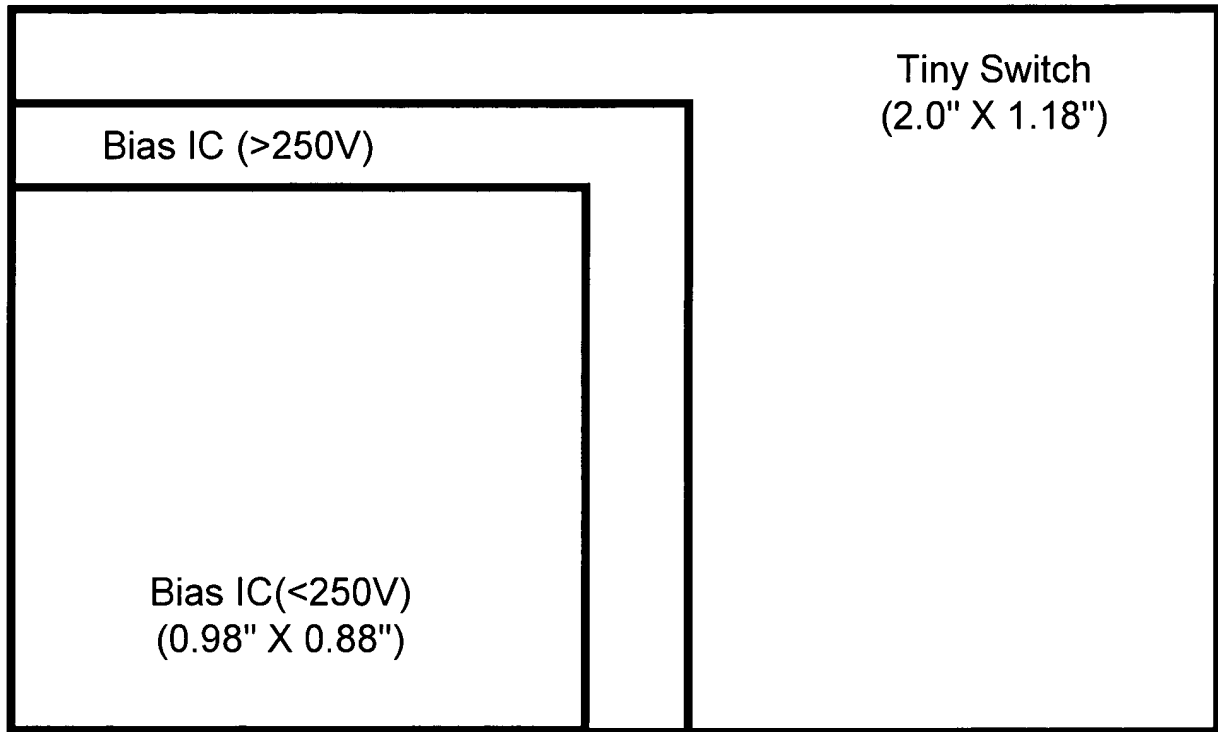
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### Figure 17



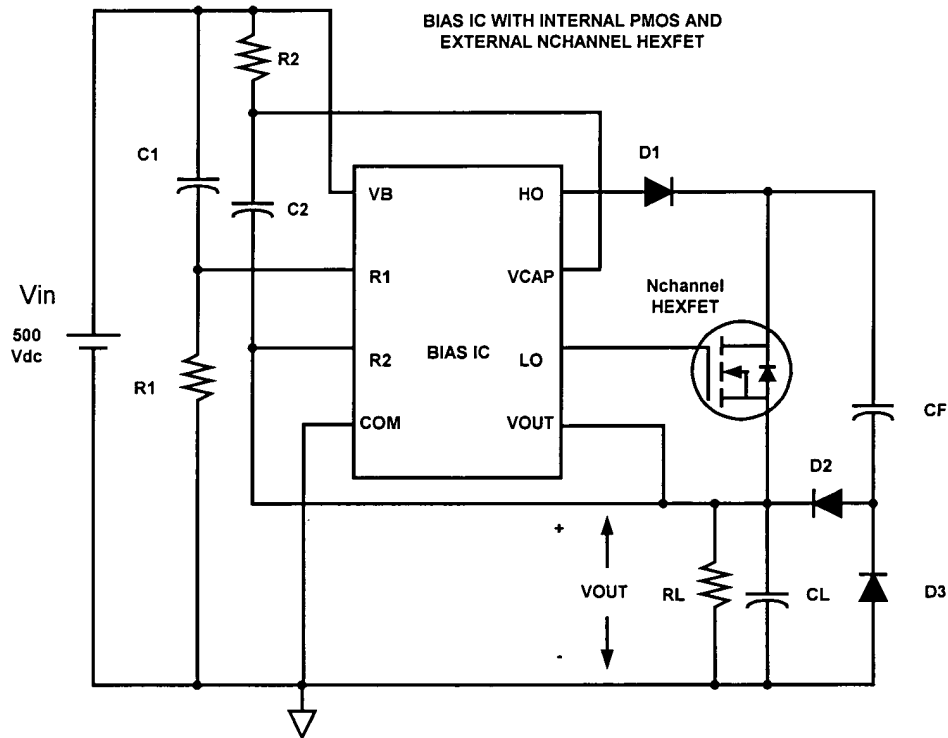
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**Figure 18**



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Figure 19





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Figure 20

